

Descriptions of new species of HETEROCEROUS LEPIDOPTERA
from Madagascar; by ARTHUR G. BUTLER, F.L.S., F.Z.S.

The following species have recently been added to the National Collection, and were, with one exception, obtained by the Rev. Deans Cowan, at Ankafana, Betsileo Country; among other forms collected by this gentleman were specimens of a *Pergesa*, nearly allied to *P. humilis* (described as a *Chærocampa*), and which I believe to represent the *Chærocampa batschii*, of Keferstein; it differs from *P. humilis* in its darker and much redder coloration, the primaries show a distinct blackish shade, extending from the end of the cell over the costal area, and forming a large diffused cuneiform patch (this is very slightly indicated in Keferstein's figure), the secondaries, excepting at base and along the costal border, where they are whitish-brown, and at anal angle, where there is a diffused reddish patch, are almost black; the insect is also slightly smaller than Keferstein represents it, but this may be due to our possessing the male.

Specimens of *Nephele charoba* obtained by Mr. Cowan, show a remarkable variation from reddish clay colour to greyish olivaceous in the colour of the primaries; they also differ (as *N. morpheus* from *N. hespera*), in having a conspicuous, more or less triangular, silver spot at the end of the cell.

CHALCOSIIDÆ.

HYPSOIDES, n. gen.

Form of the wings as in *Hypsa*; costal vein of primaries extending to about the external sixth of the costal margin; subcostal three-branched, its first branch given off before the end of the cell and not reaching the apex, the second and third from a long footstalk emitted at the superior angle of the cell and at the same point with the upper radial, discocellulars oblique emitting the lower radial from their upper third; second and third median branches emitted from one point at the inferior angle of the cell; secondaries with the costal and subcostal veins

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apparently united for some distance from their origins, the subcostal emitting its two branches from a long footstalk; upper discocellular short and transverse, lower discocellular long, slightly arched and oblique; median branches normal, well separated; submedian and internal veins both extending to outer margin; body moderately robust, extending slightly beyond the secondaries, hairy; antennæ two-fifths the length of primaries, broadly bipectinated, but compressed; palpi very short, not extending in front of the head; legs thick, the tarsi rather long.

1. *Hypsoides bipars*, n. sp.

♂ Wings above cream coloured, slightly yellower at the margins, the primaries with the costal margin and apical half sericeous chocolate-brown; body ochreous, antennæ black; under surface slightly paler, secondaries with a brown apical costal dash; legs black above, ochreous below. Expanse of wings 58 mm.

Forests of Ancaya (Robillard).

Although the style of coloration of this species somewhat resembles that of the *Liparidæ*, I believe it structurally to be allied to some of the genera of the *Chalcosiidæ*; from the *Hypsinae*, its short palpi at once distinguish it.

ZYGÆNIDÆ.

2. *Hydrusa Kefersteinii*, n. sp.

♀ Somewhat reminds one of the *Glaucopis tollinii*, of Keferstein; blackish or dark greyish-brown; primaries with six large oval cream coloured spots, the first three forming a triangle on the basal half, the three others upon the last subcostal and the median interspaces; a short pale yellow streak at base of inner margin; secondaries with a large pyriform cream coloured patch on abdominal area, and two unequal small spots on the second median and radial interspaces; a spot on each side of the collar and another on each shoulder yellow, abdomen with a row of cream coloured spots on each side. Expanse of wings 36 mm.

Ankafana, in the forest.

ARCTIIDÆ.

CALLICEREON, n. gen.

Allied to *Eucereon* of tropical America, but the body less robust; the discoidal cell of secondaries decidedly shorter.

3. *Callicereon affine*, n. sp.

♂ Closely allied to *C. heterochroa* (*Deiopeia heterochroa*, of Mabille), but differing in the coloration of the secondaries, which are semitransparent pearly-white, with the costal border and apex, a narrow external margin and the tips of the veins, dark brown; a small black spot at the end of the cell. Expanse of wings 34 mm.

Ankafana.

4. *Daphænura minuscula*, n. sp.

♀ Primaries above greenish-black, crossed by six narrow squamose ochreous bands, and with a spot of the same colour at the end of the cell; secondaries orange-ochreous; the costal and external borders and a spot at the end of the cell black; head black; collar and thorax carmine; abdomen black, with anal segment and tuft carmine; primaries below blackish, with three subconfluent longitudinal costal dashes; secondaries ochreous; a spot at the base, a subbasal transverse spot divided by the costal vein, a spot at the end of the cell and the outer margin, black; body below black-brown, anus carmine. Expanse of wings 34 mm.

Ankafana.

5. *Euchaetes madagascariensis*, n. sp.

♂ Primaries ochreous, becoming gradually paler towards the outer margin, secondaries pale ochreous, darker along the abdominal margin; body dark ochreous, with dorsal and lateral series of black spots; antennæ black; wings below pale creamy-ochreous, with darker costal borders; body below dark ochreous, tibiæ and tarsi black above. Expanse of wings 43 mm.

Ankafana.

Nearest to *E. aurata*, from South America, but larger and with comparatively narrower primaries.

LITHOSIIDÆ.

6. *Bizone saalmuelleri*, n. sp.

♀ Snow-white; primaries above with a scarlet spot near the base of the costal border and below it a black spot; a nearly transverse scarlet stripe across the basal third, inangled upon the costal border, and followed by a small black spot in the cell; a second scarlet stripe oblique, and sometimes slightly sinuous

just beyond the cell and preceded by a black discocellular lunule; a subapical bisinuated slender squamose scarlet line; back of collar, a band across each tegula, and a spot in the centre of the thorax, scarlet; antennæ and palpi ochreous; the anterior and middle pairs of legs banded with ochreous, posterior legs with ochreous tarsi; body and wings below white, almost without markings, but the scarlet stripes of the primaries visible through the wing as pink stripes; the costal margin ochreous towards the base. Expanse of wings 43-48 mm.

Ankafana.

Allied to *B. adita*, of Moore, from Darjiling.

7. *Coracia plumicornis*, n. sp.

♂ Primaries much like those of *C. ciliaris*, of Europe, silvery-grey, with darker mottling; a broad white band with zigzag edges at basal third; a discal stripe formed of four irregularly placed white lunules and an apical spot white; a marginal series of black dots; fringe and entire surface of secondaries cream coloured; body white, slightly sordid towards the posterior extremity; antennæ beautifully plumose, dark grey; primaries, costa of secondaries and body below silvery-greyish; remainder of secondaries white. Expanse of wings 17 mm.

Ankafana, in the forest.

The genus *Coracia* is at present so small that it is impossible to be certain that the more highly developed antennal pectination in this species entitles it to distinct generic rank; I therefore prefer to regard it provisionally as a true *Coracia*.

The species of *Sozuza* described below, although in colouring they differ much more than many of the genera in this family, are so absolutely alike in neurulation, both of the primaries and secondaries, that it is impossible to separate them generically.

8. *Sozuza punctistriata*, n. sp.

♀ Primaries deep golden-ochreous or cadmium-yellow, crossed in the middle by an oblique series of four blue-black dashes, the third >-shaped; secondaries paler ochreous; body pale ochreous with the head collar and anus dark; under surface ochreous, deepest at the borders of the wings; tibiæ and tarsi of anterior and middle pairs of legs dark grey; posterior legs barred with grey at the joints. Expanse of wings 36 mm.

Ankafana.

This and the following species bear considerable resemblance to the female of *Æonistis quadra*, though they differ entirely in neuration.

9. *Sozuza mabiliei*, n. sp.

♀ Differs from the preceding species as follows—primaries with four dark metallic green spots, two at basal third of internal area, placed obliquely one above the other and the two others just beyond the middle of the costal area, the upper one which rests upon the costa being much larger than the other; legs below dark metallic green where they are grey in *S. punctistriata*. Expanse of wings 41 mm.

Ankafana.

10. *Sozuza albicans*, n. sp.

♀ Nearly allied to *S. kingdoni*, but larger; the primaries shining snow-white with fewer black spots, as follows, one near the base, one in the cell, one just beyond the middle of the costa, one on the lower radial interspace just above the forking of the second and third median branches, and three in an oblique increasing series from the median vein to the inner margin; secondaries snow-white, the base and abdominal area broadly suffused with ochreous; thorax snow-white, spotted with black, the collar and tegulae with ochreous margins; abdomen ochreous, whitish on the anal segment; wings below white, the veins touched with ochreous at the base; body white, the sides of the pectus and margins of the abdominal segments ochreous; a series of black spots along each side of the venter; tarsi tipped with black. Expanse of wings 62 mm.

Ankafana.

11. *Sozuza sordida*, n. sp.

♀ Whity-brown; primaries with the veins and a large central costal spot white; the base of costal border, the discoidal cell, the base of interno-median area, and the external half between the veins darker brown than the remainder of the ground colour; an irregular Σ -shaped discal series of black dashes between the veins; secondaries with white abdominal border; a spot on the head and the sides of the tegulae black; abdomen blackish towards the extremity; primaries below whity-brown, sparsely speckled with blackish towards outer margin; borders white; secondaries white, sparsely speckled with blackish, especially towards the costa and outer margin; costal border

slightly brownish; body below whitey-brown, the anterior coxæ darker. Expanse of wings 47 mm.

Ankafana.

12. *Sozuza aspersa*, n. sp.

♂, ♀ Allied to the preceding species, snow-white; the primaries streaked with brown, and dotted with black between the veins; the base of costal border more or less suffused with dark brown; an irregular looped dark brown discal stripe almost agreeing in outline with the series of black dashes on the preceding species; secondaries irrorated with grey and black; body white, the collar and centre of abdomen more or less suffused with greyish-brown; a spot on the head, a dorsal line on the thorax, and the sides of the tegulæ, black; under surface white, irrorated with grey and black; primaries with a brownish discoidal streak, sometimes extending almost to apex; anterior coxæ and sides of venter more or less greyish; anterior tarsi and a streak on each side of the venter in the male black. Expanse of wings, ♂ 47 mm., ♀ 43 mm.

Ankafana.

13. *Prabhasa carnea*, n. sp.

♂ Allied to *P. venosa*, of Moore, though more like *Dolgoma reticulata*; primaries above shining flesh-pink, irrorated with black; costal margin narrowly ferruginous; a blackish spot beyond the middle of this margin, from which a very oblique dark brown line runs outwards to the lower radial, where there is a second blackish spot, it then bends suddenly backwards obliquely to the inner margin just opposite to its commencement, and runs along this margin almost to the base; secondaries semitransparent creamy-white, with the outer half of the veins, the outer margin and fringe, pale ferruginous; head and thorax brownish flesh colour; abdomen with the basal half ash-grey, the anal half whitey-brown; primaries below pale rosy-brown, secondaries as above; body rosy-brown, distinctly deeper in colour than the primaries. Expanse of wings 32 mm.

Ankafana.

14. *Prabhasa ardens*, n. sp.

♂, ♀ Allied to the preceding species, but decidedly smaller, the primaries brownish flesh colour, distinctly darker and redder than in *P. carnea*, very sparsely irrorated with black scales

beyond the middle; some examples also have a black dot beyond the middle of the costa, a transverse abbreviated black line below it, from the inner margin to the first median branch, and a black <-shaped marking on the second median interspace at about the middle of the disc; the secondaries, body and under surface are similar to those of *P. carnea*, the females being a little paler. Expanse of wings ♂ 20–21 mm., ♀ 24–25 mm.

Ankafana.

The specimens with black markings on the primaries are slightly larger than those without them, but the similarity in other respects is so complete that I am constrained to regard both forms as referable to one species.

Lithosia notifera, of Saalmüller, appears to me to be allied to the two preceding species; if I have rightly identified it, we have it from Ankafana.

15. *Prabhasa nigrosparsa*, n. sp.

Primaries above sericeous whity-brown or grey, densely irrorated with black; one or two black spots near the base; a black spot at apical two-fifths of costal margin, a dot at the end of the cell, two black spots on the radial interspaces near outer margin, and a black spot on the inner margin opposite to the costal spot; secondaries creamy-white, slightly flesh tinted at the borders; thorax of the same colour as the primaries, abdomen with the basal half ash-grey, the anal half pale flesh tinted; primaries below smoky-brown, black speckled, greyish towards the outer margin; secondaries creamy-whitish, flesh tinted, and black speckled on the costal area and external border; pectus brown, the anterior legs blackish above, posterior legs and venter pale pinky-brown. Expanse of wings 26–27 mm.

Ankafana.

16. *Prabhasa flexistriata*, n. sp.

General coloration of the preceding species, but with somewhat narrower primaries and different markings; primaries above greyish-brown, with two ill-defined longitudinal streaks and the external third whitish; the entire surface irrorated with black, the costal margin and the veins upon the external area blackish; a black costal spot just above the end of the cell, from which a dark brown stripe runs to the lower radial vein, whence to the second median branch it passes transversely behind two

small black spots, then turns inwards longitudinally to above the middle of the first median branch, and then again downwards to just beyond the middle of the inner margin; fringe white, tipped with grey; secondaries cream coloured, slightly sordid towards the costa; body greyish-brown, the abdomen slightly paler than the thorax; primaries and pectus greyish; secondaries and sides of venter cream coloured. Expanse of wings 24 mm.

Ankafana.

17. *Prabhasa fasciata*, n. sp.

Creamy-whitish; primaries above sparsely speckled with blackish, and with a broad irregular blackish streak from the basal two-fifths of inner margin to the outer margin just below apex; secondaries with greyish external area, narrowing towards the anal angle; thorax with a black spot just behind the collar; abdomen with slightly buff tinted anal segment; primaries below grey, with creamy-whitish borders; secondaries creamy-white, with the costal area greyish towards apex; body creamy-white, the anterior legs greyish. Expanse of wings 25 mm.

Ankafana.

18. *Prabhasa angustata*, n. sp.

Primaries sienna-red, black speckled, changing to greyish-brown towards the outer margin, and with brown costal margin; a black costal spot beyond the middle, and three or four increasing longitudinal black dashes on the median and interno-median interspaces; a black spot just beyond the middle of the inner margin; fringe grey, with a broad cream-coloured basal stripe limited externally by a dark grey line; secondaries creamy-whitish with the basal third ochreous and the apical area greyish; fringe pure white excepting at apex, where it is dusky; body ochraceous; under surface cream coloured, slightly buff tinted at the base of the wings; primaries slightly tinted with greyish; legs greyish. Expanse of wings 24 mm.

Ankafana.

19. *Prabhasa insignis*, n. sp.

Aspect of *Macotasa tortricoides* from Java; primaries above ochreous, sprinkled with a few widely separated black scales, the internal and external areas slightly redder than the rest of the wing; basal third of costal margin narrowly edged with black; a conspicuous cuneiform black spot just beyond the

middle of the costal border, and a small black submarginal spot on the lower radial interspace; secondaries cream coloured; the fringe and outer margin slightly flesh tinted; thorax pale buff, a black dorsal line behind the collar; abdomen with the basal half cream coloured, the anal half ochreous; primaries below flesh tinted, changing to pale buff on the costal and external borders; discoidal area slightly greyish; secondaries cream coloured; body below dusky, cream coloured at the sides. Expanse of wings 27 mm.

Ankafana.

20. *Lysceia parvula*, n. sp.

♂ Primaries above pale greyish-brown, darker and redder on basal third, which is bounded externally by an irregularly angulated dusky margined white stripe; a black dot at the end of the cell, interrupting the white border of an angulated dusky brown stripe; external border broadly dusky, traversed by an arched submarginal white stripe; secondaries and body cream coloured; primaries below greyish, the submarginal white stripe of the upper surface faintly visible; internal border pale; secondaries and body creamy-white; legs slightly yellower. Expanse of wings 17 mm.

♀ Larger than the male, the primaries more uniform and paler, the dusky stripes indistinct, especially towards the costa, and without white borders; three dusky spots, one in the cell, the second at the end of the cell, the third subapical, arranged in a nearly equidistant longitudinal series; primaries below greyish-white, with cream coloured borders; secondaries, body and legs uniformly cream coloured. Expanse of wings 20 mm.

Ankafana.

I believe that I am right in associating the above as opposite sexes of one species.

21. *Eugoa marmorea*, n. sp.

♂ Primaries above snow-white, with an irregularly cuneiform brown patch, the anterior margin of which is black, and extends to the centre of the costa, and the posterior margin along the median vein to the origin of its first branch, where it is immediately followed by a small black spot; a broad irregular patch of reddish and greyish-brown, filling in the area around the external angle, which is occupied by a small spot of snow-white; a short black costal dash, from which a brownish streak runs transversely to the superior angle of the

cell, and below which, at the end of the cell, are two minute dusky dots; a black apical costal spot; secondaries cream coloured; thorax greyish-brown, abdomen cream coloured, snow-white at base; wings below whitish-brown, almost cream coloured, the primaries with the costa and discoidal area grey; a cuneiform dark grey costal apical patch, from which a grey streak runs indistinctly across the disc to the end of the cell of secondaries; body pale creamy-buff. Expanse of wings 17 mm.

Ankafana.

22. *Eugoa placida*, n. sp.

♂ Primaries above creamy-white, the costal border pale reddish-brown, a band of the same colour at basal third preceded by an oblique black stripe, which is inangled upon the costal border; a second band or stripe at external third biangulated or simply zigzag, its extremities blackish; a third band with irregularly undulated outer edge half-way between the second band and the external border, which like it is of a pale reddish-brown colour; a small black dot in the cell and a second at the end of the cell; secondaries cream coloured; thorax pale flesh tinted, with a black streak on each tegula; abdomen flesh tinted, white at base; primaries below greyish cream coloured, with the basal half of the internal border purer in colour, and the costal and external margins slightly yellowish; secondaries creamy-white; body below flesh tinted. Expanse of wings 22 mm.

Ankafana.

23. *Nola bryophiloides*, n. sp.

Primaries white, irrorated with grey; costal margin spotted with black; a sigmoidal black line running from the second costal spot (at basal fourth) to the inner margin; a second line running from the fourth costal spot (at external third) in a regular arch to the middle of the first median interspace, then abruptly inwards, outwards and downwards to the outer third of the inner margin; a trisinate black submarginal stripe, followed by three almost marginal blackish streaks; a marginal series of minute black dots; fringe spotted with dark grey; secondaries shining creamy-whitish, with greyish apical area and outer margin; thorax white, grey speckled, abdomen cream coloured; primaries below dark grey, with whitish internal border; secondaries shining white, with greyish apical area and margin; body below grey; legs barred with white. Expanse of wings 22 mm.

Ankafana.

Allied to *N. strigulalis* of Europe.

LIPARIDÆ.*

24. *Charotriche limonea*, n. sp.

♂ Allied to *C. ochrea*, but lemon-yellow; the primaries mottled across the disc with cadmium-yellow; the centre of the wing from the discoidal cell to the inner margin crossed by a band, formed by the approximation one below the other of three oblong patches of coarse black scales; secondaries sulphur-yellow, with lemon-yellow abdominal area; body lemon-yellow, deeper in front than behind, the tegulae crossed upon the shoulders by an oblique testaceous bar; anal segment and a few scattered hairs on the lateral segments black; antennae whitish with testaceous pectinations; wings below sericeous sulphur-yellow, pale; the base of the wings and the costal margin of primaries suffused with lemon-yellow; body below lemon-yellow, legs sulphur-yellow, venter silvery-whitish in the centre, anus black. Expanse of wings 40 mm.

Ankafana.

Should be placed between *C. ochrea* and *C. inconcisa*, Walk.

25. *Artaxa incommoda*, n. sp.

♂ Primaries above creamy-white; costal margin ochreous towards the base; secondaries ochreous, with cream coloured costal area; body cream coloured, anus ochreous; antennae with testaceous pectinations; under surface cream coloured; the costal border of primaries ochraceous, most distinctly towards the base. Expanse of wings 26 mm.

Ankafana.

PACHYCISPIA, n. gen.

Allied to *Cispia*, but the primaries more pointed at apex; sub-costal four branched, the first branch emitted before the end of the cell, the second and third forming a rather short and narrow fork to apex, the fourth emitted from below the foot-stalk of the second and third near its origin; the upper radial emitted from the superior angle of the cell, the lower from the centre of the discocellulars, which are angulated; three median branches all well separated; secondaries relative'y smaller than in *Cispia*, narrower; the discoidal cell reaching to about the

* We have received both sexes of what appears to be Walker's *Porthesia producta*, the female only differing from his much broken type in being rather smaller.

middle of the wing; the subcostals emitted together at the superior angle of the cell, and the second and third medians from the inferior angle, the radial from the middle of the discocellulars which are arched; body very robust, with short and broadly pectinated antennæ, with filiform extremities, abdomen without distinct anal tuft; legs short, woolly and moderately thick.

26. *Pachycispia picta*, n. sp.

♂ Primaries above red-brown, densely irrorated with grey and black, the central belt represented by two opposed dentate-sinuate blackish lines, inangled above the middle, the inner one bounded internally by four pale ochreous rounded spots from the subcostal to the submedian vein, the outer one bounded externally by an oblique series of four similar spots from the third median to the submedian vein; the belt also encloses two silvery-white spots upon the internal border; external border broadly ochraceous, with deeply dentated inner edge, but the fringe and outer margin of the ground colour; secondaries ochreous; head white, the vertex densely sprinkled with chocolate coloured scales; collar and sides of thorax flesh-pink, sprinkled with ferruginous scales; tegulæ white, sprinkled with black, tipped with chocolate and white, and bordered internally with ochraceous; dorsal surface of thorax crested, ochreous; abdomen bright ochreous, with the sides and anus white; under surface sericeous-white; the primaries slightly ochraceous in the middle, all the wings with the costal area finely irrorated with chocolate, a ferruginous subapical spot on the outer margin; a diffused ferruginous central band, a black dotted dentate-sinuate discal line, a more or less defined subapical abbreviated chocolate-brown band on the primaries, the fringe of the same colour and a black discocellular dot on the secondaries; anterior tibiæ black, sprinkled with white scales; tibiæ of other legs with a black spot; venter irrorated with ferruginous. Expanse of wings 52 mm.

Ankafana.

Not at all an uncommon species.

27. *Lymantria dulcinea*, n. sp.

Allied to *L. monacha*, of the same form; both sexes with the same pattern as the male of that species; primaries of the male sericeous-white, with the dentate-sinuate lines and marginal dots red-brown; secondaries pale rose-pink; head, collar and tegulæ

pale flesh colour, with red-brown markings, thorax white; abdomen cream colour, darker towards the anal extremity; antennæ with sandy-yellowish pectinations; under surface pinky-white; primaries of the female sericeous creamy-white, tinted with sulphur-yellow along the borders; the markings dark olive-brown; secondaries with the basal two-thirds pale rose-pink, fading into sericeous-white on the external area; the margin spotted with brown (a character wanting in our male example); fringe pale sulphur-yellow; thorax cream colour, yellowish in front, the markings olive-brown; abdomen greyish-white; under surface pale sulphur-yellow; wings with brown discocellular lunule, three squamose arched dentated discal brown stripes and a marginal series of black dots. Expanse of wings, ♂ 35 mm., ♀ 46 mm.

Ankafana.

There is also a female which seems to be a variety of this species, in which the primaries and thorax above are entirely pale sulphur-yellow, with the brown markings less defined above, slightly less irregular and almost obliterated on the under surface; the brown marginal spots of the secondaries are also less numerous.

From *L. rosea* this species differs entirely in the shape of the primaries; that insect being more like *L. pusilla* in shape.

28. *Calliteara elegans*, n. sp.

♂ Allied to *C. abietis*, of Europe; primaries above snow-white, coarsely speckled with black scales, especially upon the basal third, which is limited by an angulated brown stripe; veins, excepting upon the centre of the costal area, brown; an oblique post-median zigzag black line immediately followed by a costal patch of black scales, and below this by an increasing irregular brown band, its inner edge inarched; a dentate-sinuate black discal stripe united at its upper extremity to the first angle of the zigzag black line; the black speckling of the external border indicating a marginal series of rounded white spots; fringe sandy-brown, spotted with whitish; secondaries ochreous, deepest on the abdominal border, greyish in the central longitudinal area, and with an imperfect dusky external border; fringe tipped with whitish; head whity-brown; palpi black, banded with whity-brown at the extremities; antennæ white, black speckled and with brown pectinations; thorax tawny, white-speckled,

tegulae almost wholly white black speckled, abdomen tawny-ochreous; wings cream coloured, irrorated with black on the costal area; the cells terminating in conspicuous whitish pupilled black spots, beyond which, on the costal areas, are short transverse black dashes; fringe of primaries spotted with brown at the tips; body below testaceous; tibiae above white, barred with black; tarsi black. Expanse of wings 51 mm.

Ankafana.

29. *Calliteara grandidieri*, n. sp.

♂ Also allied to *C. abietis*, but in the general coloration of the primaries more like *Dicellomera fascellina*; primaries sericeous mouse-grey, sparsely sprinkled with black atoms, crossed by four zigzag white stripes, more or less irrorated with large black scales, and spotted with orange: the black scaling most prominent on the two first stripes, which cross the wing close to the base and just before the middle respectively, the two others cross the disc, the outer one being interrupted upon the radial interspaces; a marginal series of white edged orange spots speckled with black, and a somewhat similar spot at the end of the cell; secondaries white, the fringe spotted with grey; body whity-brown, sandy-reddish behind the collar, which is white and black speckled at the back; abdomen with blackish dorsal spots; antennae white, black speckled and with dark brown pectinations; under surface of primaries pale silver-grey, the costal and discoidal areas to the middle of the disc washed with dark grey; a diffused blackish spot at the end of the cell and a transverse costal dash beyond it; fringe spotted externally with dark brown; secondaries below white, a few black scales at the end of the cell, and a short streak of black scales beyond it upon the costal area; body whity-brown, tibiae and tarsi black, banded with white. Expanse of wings 53 mm.

Ankafana.

Mardara complicata, of Darjiling, would be better located in this genus.

30. *Calliteara mærens*, n. sp.

♂ Allied to *C. viola* (*Mardara viola*, Butler*); primaries above lilacine-grey, sericeous, the basal area sap-green, varied with black and white scales; the central belt indicated by two

* The species of *Mardara* are broader winged and altogether more heavily built than *C. viola* which agrees with *Calliteara*.

sap-green stripes enclosing irregularly undulated black lines, these stripes are wide apart and enclose an almost circular area in their upper half, but run nearly parallel below the median vein and its first branch, and are almost obliterated by snow-white scales towards the costa; a submarginal series of sap-green spots, and a marginal series of similar spots but for the most part enclosing black lunules; fringe indistinctly spotted with grey; secondaries pale greyish brown with whity-brown, external border; thorax reddish olivaceous sprinkled with white; abdomen brown; antennæ white, with brown pectinations; under surface sandy-whitish; blackish discocellular spots followed by two indistinct dusky discal stripes; primaries with the discoidal area and part of the disc smoky-brown; fringe externally spotted with blackish; secondaries with the fringe spotted at apex. Expanse of wings 43 mm.

♀? Primaries above white irrorated with sap-green, and with black scales indicating the male markings; the secondaries slightly paler than in the male; the primaries below whiter without the decidedly darker brown suffusion; the markings indistinct; secondaries with the outer discal stripe alone distinct, especially at anal angle. Expanse of wings 54 mm.

Ankafana.

I have very little doubt that the female above indicated belongs to this species, but it is a good deal worn.

31. *Calliteara pastor*, n. sp.

♂ Primaries above bright emerald-green, spotted with sericeous snow-white, irregularly and imperfectly striped with grey, and crossed by three irregularly sinuated black lines, the first subbasal, the two others representing the central band, and formed nearly as in the preceding species; between the first and second of these black lines is the first grey stripe, which is spotted on costal margin and below the cell with black; a 3-shaped black discocellular spot; base and external border white, the outer margin and fringe flecked with brown (apparently with a marginal series of small black spots, but the type is a little rubbed); secondaries pale greyish-brown; body sandy-yellow, flecked with white, abdomen brownish, with white edged segments and white tipped yellow dorsal tufts; under surface cream coloured; wings with discocellular spots and an indistinct discal stripe grey. Expanse of wings 34 mm.

Ankafana.

32. *Calliteara prasina*.

♂ Primaries above pale sap-green, the costal area darker and bluer-green, divided by oblique snow-white dashes; the fifth dark-green costal patch from the base continued, as a sinuated sap-green line darker than the ground colour, across the disc; beyond this there is a very faint indication of the commencement of a series of white bordered spots; costal margin black edged between the white dashes; a large blackish oval patch before the middle of the inner margin; fringe creamy-white; secondaries white, the basi-abdominal half sordid; a brown dash close to anal angle; thorax green; abdomen whitish-brown with a dark brown dorsal crest; under surface white; the primaries with a discoidal streak and a subcostal streak expanding towards the apex dark brown; costal border cream coloured; submedian and internal areas streaked with red-brown; secondaries with a brown flecked arched purplish or laky-brown streak from the base to the extremity of the second median branch, where it joins a second straight longitudinal streak of the same colour; abdominal area flecked with laky-brown; legs greenish above; venter with the posterior half flesh tinted at the sides and blackish in the middle. Expanse of wings 30 mm.

Var. Paler than the typical form, rather smaller; the primaries with no blackish oval patch on the internal area; secondaries and under surface snow-white; primaries with the discoidal and subcostal streaks ill-defined, no other markings; secondaries without the brown streaks; venter without the blackish patch. Expanse of wings 29 mm.

Ankafana.

33. *Dasychira pumila*, n. sp.

♂ Primaries above with the costal area snow-white, the remainder of the wing chocolate-brown, interrupted by irregular transverse white stripes; two irregularly sinuated black stripes across the basal third and a third just beyond the cell, black; these stripes are formed nearly as in *D. pudibunda*; a brown >-shape marking at the end of the cell, external border white with a slender brown line; fringe white tipped with grey; secondaries cream coloured, the apical area irrorated with greyish-brown; thorax white, the collar and head sprinkled with chocolate-brown; metathorax with a large central blackish patch; abdomen cream coloured irrorated with brown; antennæ white with dark brown pectinations; primaries below dark smoky-grey, costal margin spotted beyond the middle with black

and white; internal border whitish; fringe snow-white; secondaries white, with a few scattered dark brown scales, a brown spot at the end of the cell and another at apex; body below white, legs brown above. Expanse of wings 25 mm.

Ankafana.

34. *Dasychira pallida*, n. sp.

♀ Primaries above white, densely irrorated with dark brown so as to give them a greyish aspect; the basal third crossed by two ill-defined irregularly undulated blackish lines; a third line, much as in *D. pudibunda*, beyond the cell; discocellulars also blackish; secondaries grey; thorax white, densely irrorated with brown, abdomen greyish white; antennæ red-brown; primaries below pale smoky-brown with whitish internal area; secondaries white irrorated with smoky-brown; body below sordid white; legs brownish; the tarsi dark brown flecked here and there with white. Expanse of wings 44 mm.

Ankafana.

Unfortunately the type is a little rubbed; in general coloration it is not unlike *D. punctatella* of Motschoulsky.

35. *Parorgyia phasiana*, n. sp.

♂ Basal two-fifths of primaries brown, the lower third of this area being extremely dark, almost black, the outer edge also dark brown, oblique and biangulated in the middle; immediately following this is a broad belt with irregularly undulated blackish outer edge, the upper two-thirds twice as broad as the lower and of a dull steel-blue colour sprinkled with greenish scales, the lower third whitish with pale greenish scales in the centre; external area whity-brown mottled with dark brown, which almost covers the central third; secondaries pale greyish-brown; body blackish-brown; the head a little paler; antennæ whitish with dark brown pectinations; wings below sordid whitish, with dusky discocellular spots and a regular discal series of sub-confluent small spots; body blackish in front whity-brown behind. Expanse of wings 33 mm.

Ankafana.

36. *Parorgyia maligna*, n. sp.

♂ Allied to the preceding species, although with a very different aspect; basal area whity-brown, with the internal third black; a broad almost central dark brown irregular belt from

costa to inner margin; the costal border from base to the outer edge of this belt fuliginous-brown barred with black, thus reducing the pale portion of the basal area to a large oblique patch; external area brown, the apical portion (which occupies nearly a third of the entire wing) whitish, with an oblique dark brown costal spot, and the lower half traversed by a submarginal series of pale edged black spots; a marginal series of smaller black spots; fringe whity-brown, spotted with blackish; secondaries whity-brown, with two indistinct arched dusky discal stripes, the outer one, which is submarginal, rather broad towards apex; thorax dark sandy-brown, touched here and there with darker brown, the tegulae crossed obliquely in the centre by a blackish bar; antennae and abdomen dark purplish-brown; under surface sericeous cream coloured; primaries with an indistinct spot at the end of the cell and a stripe beyond it, greyish; a small costal spot towards apex; costal border sandy-yellowish, secondaries with a small indistinct dusky spot at the end of the cell and a second larger one close to apex; pectus sandy-yellowish in front, anterior legs blackish above; venter laky-brown. Expanse of wings 33 mm.

Ankafana.

SATURNIIDÆ.

37. *Bunœa plumicornis*, n. sp.

♂ Form of *B. alcinoe*, but in pattern more like *B. aslauga* and *diospyri*; wings deep purplish-brown; the disc crossed by a narrow band of this colour, relieved by a broad diffused belt of snow-white; the external border olivaceous shading into dull yellowish-brown at the outer margins; primaries with the basal two-thirds of the costal area broadly cream coloured, irrorated (excepting at the base) with grey-brown scales; basal area (excepting the costal border) dark laky-brown, bounded above and externally by an elbowed oblique white band; immediately beyond the cell is a large subquadrate hyaline-white patch, notched in front and almost touching the snow-white discal belt; secondaries lake-red at base, this colour being bounded externally by a rather broad snow-white band; centre of costal area rose colour, interno-median area with a few rose-red hairs mixed with the brown ones; a very large golden-orange ocellus, with hyaline-white pupil, black border and snow-white zone, over the end of the cell; the white zone confluent with the white discal belt; head and thorax dark purplish-lake; antennae very large, strongly plumose, black; abdomen sandy-brown, redder at the

base; under surface of the wings brown; so densely speckled with white as to give it a grey tint; external border dark chocolate-brown, with dentate-sinuate internal edge; all the wings also crossed beyond the middle by two convergent dark brown bands, the outer one bounded internally by a widely diffused snow-white border; primaries with the basal half of the discoidal cell deep plum colour, the external half whitish; the interno-median area bright rose colour; the hyaline-white spot as above; secondaries with sandy abdominal border; the ocellus of the upper surface replaced by a dark brown patch crossed by an almost cuneiform yellowish patch, with hyaline-white centre; pectus dark purplish-lake; tibiæ and tarsi blackish; venter brown, with two series of subconfluent black spots down each side; anus yellowish, tipped with rose coloured hair. Expanse of wings 173 mm.

Ankafana.

In the dark ground colour of its wings this species agrees with some examples of Stoll's *B. caffraria*, the approximation of the hyaline patch to the pale belt of primaries also reminds one of this species, but the white colour of this belt brings it nearer to *B. diospyri*, of which indeed I should have supposed it to be the male were it not for the fact that this is the sex of M. Mabille's type; our example of *B. diospyri* is a female, and certainly agrees more nearly with *B. aslauga* (except in its yellow colour) than the beautiful species above described.

38. *Ceranchia reticolens*, n. sp.

♂ Allied to *C. apollina*, but the primaries densely irrorated with black scales, the veins distinctly black; the ocellus black with small dull orange oblique centre; the bands indicating the central belt more parallel, the outer one being straight from the lower radial to the inner margin, its external white border tapering to a point instead of being continued round to the costa; secondaries with black veins, blacker ocellus, straighter discal stripe and black external border; abdomen greyer with dark brown anus. Expanse of wings 121 mm.

The venation agrees with that of the female of *C. apollina*; the cocoon is very different, the true cocoon being placed in the centre of a much larger and pyriform net of pale golden wire-like silk, which is attached to the twigs of the food-plant;

the length of this outer envelope is 89 millimetres, and its greatest width 48 millimetres; in *C. apollina* the double character of the cocoon is less readily seen.

39. *Ceranchia cribrelli*, n. sp.

♀ Extremely pale smoky-brown, with slightly darker dentated external borders; primaries with cream coloured woolly basal area; two subparallel blackish bands indicating the central belt; the inner one slightly arched, the outer one arched above the lower radial; ocellus whitish-brown with blackish margin; secondaries with a blackish band somewhat as in *C. apollina*, but much further from the outer margin; ocellus black, oval with narrow dull ochreous centre; body whitish-brown; thorax almost white, with the head, collar and tegulae ochreous; antennae black; wings below without bands; the secondaries without ocellus; pectus brown; legs dull ochreous; venter whitish-brown. Expanse of wings 150 mm.

The pupa is quite unlike that of the other two species, being single and formed like that of *Cricula fenestrata* of coarsely woven shining silvery-whitish silk, pierced in all directions with round holes, and especially towards the larger extremity.

40. *Copaxa vulpina*, n. sp.

♀ Probably allied to *C. dura*,* foxy-red; wings with an irregular submarginal series of unequal grey-clouded whitish spots; a straight oblique grey stripe from the costa of primaries near the apex to just above the middle of the abdominal border of secondaries; primaries with a second straight stripe, perpendicular, running across the middle of the wing and joining the oblique stripe upon the inner margin; half-way between these two stripes, beyond the cell, is a small circular grey-bordered hyaline-white spot; secondaries with a rounded grey spot with minute hyaline pupil upon the lower discocellular; costal area rather paler than the rest of the wing; abdomen rather paler and more pink in colour than the thorax; under surface of wings washed with flesh-pink, more sandy towards the base; external

M. Mabille refers this species to *Perisomena*, but *P. coccigena* (the type of the genus) has enormous antennae; whereas in the allies of *P. dura* they are very small; Walker's *P. semicruca* is *Cirina forda*, of Westwood.

border broadly foxy-red, its inner edge slightly undulated on the primaries and regularly zigzag on the secondaries; primaries with a straight central brown stripe similar to the inner grey one on the upper surface but apparently continued across the secondaries, although the stripe on these wings represents the lower half of the oblique stripe of the upper surface; ocelloid spots darker than above and with narrow whitish margins; a submarginal series of pinky-white spots, more or less conical in shape; tibiae and tarsi above rose coloured; venter mottled at the sides with whitish. Expanse of wings 81 mm.

Ankafana.

LASIOCAMPIDÆ.

The species which appears to me to be the *Bombyx echinata*, of Saalmüller, belongs apparently to the South American genus *Hydrusa*.

41. *Lasiocampa leonina*, n. sp.

♀ Wings above sandy-yellow, clouded with smoky-grey; crossed before the middle by a slightly irregular dusky line and beyond the middle by a waved subangulated line enclosing a greyish area, representing the central belt and followed on the primaries by a wavy narrower grey belt; at the end of the cell and within the first belt is a cream coloured spot; the external area is slightly clouded with grey on the primaries but on the secondaries is dark reddish, and clouded with dark grey, it is bounded internally on all the wings by a series of grey bordered whitish spots; body saffron-yellow, the thorax dull reddish-brown in front; wings below pale sandy-yellowish, shading into reddish towards the external borders; a series of submarginal grey-bordered white spots more distinct than above; secondaries crossed from the basal fourth to beyond the middle by three parallel pale dentate-sinuate bands; body below bright gravel-yellow, saffron-yellow at the sides. Expanse of wings 96 mm.

42. *Lebeda cowani*, n. sp.

♂ Pale foxy-red; primaries crossed at basal fourth by a slightly arched oblique red-brown line and at external third by a second similarly coloured line parallel to the outer margin, between these lines and at the end of the cell is a small blackish spot; external third sericeous, a little paler than the rest of the

wing and traversed in the centre by a series of dusky lunules; secondaries with whitish abdominal area, a broad nebulous dark grey patch across the disc; abdomen slightly paler than the thorax; antennæ black with ochreous pectinations; under surface sandy-reddish, the wings crossed beyond the middle by a slightly sinuous brown band, internal area sericeous and paler than the ground colour. Expanse of wings 52 mm.

♀ Slightly larger than the male, sandy-whitish; markings rather less distinct. Expanse of wings 59 mm.

Apparently allied to *Bombyx sordida*, of Mabille.

43. *Eutricha nitens*, n. sp.

♂ Primaries above dark castaneous, sericeous, the internal area blotched with ochreous to beyond the middle and with white towards external angle; a nearly straight blackish-edged pale line across the basal fourth, an oblique and angulated line of the same character just beyond the middle and between them a discoidal blackish edged ochreous spot; external area shining, with a slight lilacine gloss which does not extend into the fringe; a submarginal zigzag series of snow-white dots with blackish inner edges; secondaries pale coffee-brown with the fringe much paler, sericeous; crossed beyond the middle by a slightly arched blackish stripe and with a dark red-brown marginal line; thorax dark lilacine grey, the abdomen paler and slightly redder with dull brown borders and a basal lateral flesh coloured patch*; antennæ testaceous; wings below sandy-yellowish, crossed beyond the middle by an arched diffused dusky band enclosing a dark red-brown stripe; fringe of primaries tipped with dark brown; pectus purplish, venter rosy brownish. Expanse of wings 50 mm.

Possibly allied to *Lasiocampa tamatavæ*, of Guénée.

44. *Borocera arenicoloris*, n. sp.

Form of both sexes similar to that of *B. madagascariensis*; sandy-ochraceous; primaries crossed just before the basal third by an irregularly undulated transverse dusky stripe, and beyond the middle by a second widely undulated stripe; between these

* Possibly rubbed.

the outer margin; the area between these spots and the outer stripe suffused with greyish brown, in the female from the inner margin to above the fifth subcostal branch, this suffusion extending outwards at its upper extremity across the spots to outer margin; fringe dusky along the outer edge; secondaries of the male dark fuliginous with pale buff costal area and whitish tipped buff fringe; secondaries of the female paler, the basal area, costal border and fringe whity-brown; antennæ black, with ferruginous pectinations; under surface sordid sandy-ochraceous, the basal areas of the male somewhat greyish, the internal area of primaries sericeous creamy-whitish; the female altogether greyer, especially on the disc of the primaries. Expanse of wings ♂ 50 mm., ♀ 80 mm.

This appears to be a common species.

The *B. cajani*, of Vinson, is not a *Borocera*, as a glance at the male should convince anyone; it is nearly allied to my *Lebeda cowani*.

45. *Ocha hova*, n. sp.

Aspect of *Mesotages trilunula*, of Herrich-Schäffer, from Rio Janeiro; primaries with the costal, discoidal and discal areas to the second median branch dark ferruginous, crossed near the base by an ochreous oblique line; a shining white spot at the end of the cell, followed by a patch of ochreous crossed by a ferruginous line; a subapical blackish patch; internal area broadly ochreous, crossed by four oblique zigzag ferruginous lines; external border pale pinky-brown, yellower at external angle, its inner edge irregularly zigzag and partly black edged; fringe dull brown; secondaries pale fuliginous brown, with pink reflections and golden cupreous hairs on the abdominal region; body dark ferruginous; tegulae with a large lateral ochreous patch; an ill-defined spot of the same colour at the back of the thorax; wings below pale golden brown with greyish fringes, costal margin of secondaries blackish; body foxy-red or dark ferruginous. Expanse of wings 30 mm.

Some examples are darker on both surfaces.

LIMACODIDÆ.

46. *Miresa pyroscma*, n. sp.

Primaries glossy reddish-chocolate with the costal and discoidal areas darker; internal border ochreous at the base; a transverse

bracket-shaped dusky stripe across the middle followed by an oblique subapical short dusky streak; secondaries pale ochreous; a marginal arched line and a patch on the lower half of the disc pale pinky-brownish; fringe broad, pale ochreous tipped with reddish-brown; body fiery-orange, the tegulae and tips of anal hairs brownish; primaries below pale coffee-brown with cream coloured diffused internal area; secondaries ochreous; the costal margin dark brown; discoidal cell outlined in pale brown; fringe as above; body below deep ochreous, but the pectus almost wholly concealed by the dark purplish-brown legs; palpi and antennae dark brown. Expanse of wings 34 mm.

47. *Miresa gracilis*, n. sp.

♂ Primaries above pinky-brown, the basal half darker, limited by an oblique series of unequal oblong spots, outlined in the darker tint and occupying the inner half of the external area or disc; fringe red-brown; secondaries sericeous cream colour, yellower along the abdominal border; body bright reddish-orange, the prothorax slightly brownish behind the collar, sides of abdomen at base pale yellowish; primaries below pale pinky-brown, with diffused cream coloured internal area; secondaries cream coloured with pinky-brown costal border; body below ochreous; tibiae and tarsi reddish-brown. Expanse of wings 26 mm.

48. *Anzabe micacea*, n. sp.

♂ Wings above pale flesh-brown; primaries sprinkled with black scales and glossed with silver in certain lights; a few rose-pink scales on the basal area; a nearly central oblique dark ferruginous stripe from the apex almost to the inner margin, and above it on the costal area three dark brown abbreviated stripes, all radiating from the apex; a fifth, but sandy-brown, stripe runs from apex almost to the middle of the disc, half-way between the central stripe and the outer margin; fringe dark brown, paler at the base and tipped with silvery-white; secondaries with the abdominal border and fringe creamy-whitish; body dull rose colour, the head, collar and tegulae pale brown speckled with black; abdomen with the sides whity-brown; primaries below with the costal and apical areas broadly purplish-brown, the internal area sordid silvery-white; secondaries sordid silvery-white sparsely black speckled, the costal margin purplish-brown towards the apex; body below whity-brown, the collar and palpi dull red, the legs partly purplish and red. Expanse of wings 32 mm.

This is a singularly beautiful species for the genus to which it belongs.

The *Heterogenea pinguis*, of Saalmüller, seems to me to be a species of *Semyra*.

MACROSEMYRA, n. gen.

Allied to *Semyra*, size and form of *Miresa*; it differs from both genera in the structure of the male antennæ which are simply thickened, not pectinated.

49. *Macrosemyra tenebrosa*, n. sp.

Primaries above glossy black-brown; a rather broad oblique stripe from the costa near the apex to the inner margin just before the middle, the external border and two lines on the fringe silvery-greyish; secondaries smoky-grey; thorax glossy dark brown; abdomen smoky-brown; wings below sericeous grey, the secondaries and the costal border of primaries slightly brownish; body below blackish. Expanse of wings 32 mm.

The sexes are alike excepting that the antennæ of the female are finer.

Mr. Cowan obtained several moths having the general facies of *Drepana*, but, upon examination, I find that they are Geometrites allied to *Tanaorhinus*.*

NOTODONTIDÆ.

ZELOMERA, n. gen.

Allied to *Notodonta* (*N. ziczac*), but the antennæ only pectinated to about the middle, the inner margin of the primaries without a trace of the projecting odontoid process, but angulated nearer to the base, and the discoidal cells of all the wings much shorter, not reaching to the middle, thus greatly lengthening the subcostal, radial and median nervules.

* The *Drepana rafflesi*, of Moore, belongs to this genus, being identical with *T. luteoviridata*, of Java.

50. *Zelomera imitans*, n. sp.

♂ Aspect of *Notodonta ziczac*; primaries with a basal snow-white lunule from the costa to the median vein, followed by two black dashes upon a diffused brown ground; base of internal border pale buff; subbasal area greyish crossed by a few red-brown longitudinal dashes, and bounded by a deeply dentated zigzag ferruginous and black line, which forms the inner limit of a broad central snow-white belt, speckled with grey and buff; costal margin ferruginous; between the central belt and the disc is an arched testaceous and white stripe with black margins, its inferior extremity dentate-sinuate; the inner border of the disc is greyish, the centre sienna-red with dark oblique red-brown dashes between the nervures, and the outer border irregularly greyish and bounded within by a partly white deeply dentate-sinuate stripe; there is also a slender white marginal line, spotted with ochreous and edged externally by a narrow red-brown line; fringe white, traversed by two fairly well-defined red-brown lines; secondaries dull ferruginous shading into cream colour at the base; thorax white; the head, antennæ and front of collar and metathorax red brown; abdomen red-brown, paler at the side; wings below sericeous white, with red-brown costal margins; primaries with a diffused subapical costal patch of the same colour; body below red-brown, the abdomen very pale, the tibiæ of the anterior and middle pairs of legs white. Expanse of wings 44 mm.

COSSIDÆ.

51. *Cossus fulvosparus*, n. sp.

Primaries greenish-white, varying in some examples to emerald-green, striated with blackish, with a greyish patch below the cell, enclosing a whitish spot just above the submedian vein; central three-fifths of internal border cupreous-brown; the external two-thirds spotted with reddish-orange, some of the spots forming a discal series and others a marginal series; secondaries dark smoky-brown, with bronze reflections; apical area more or less flecked with white or grey; costal area white; fringe white, spotted with black; head white; collar red-brown or purplish, sometimes with white centre; thorax greenish-white or brown, sometimes ferruginous in front; the tegulæ greenish-white or sericeous emerald-green; abdomen brown, more or less varied with white and orange; antennæ white with brown pectinations or wholly brown; wings below smoky greyish-brown, striated

with black and more or less mottled with white and dull yellow ; body below white or emerald-green, the legs banded with black. Expanse of wings 33-52 mm.

The pale and dark varieties are about equally common, the dark or green type which I shall call var. *smaragdinus*, being more beautiful, but apparently more liable to become greasy than the other.

52. *Cossus pavidus*, n. sp.

Wings above dingy-grey, primaries finely striated and speckled with black ; costal margin spotted with black ; a <-shaped black marking before the middle of the interno-median area and two ill-defined blackish spots on the disc ; fringe flecked with black ; secondaries whiter than the primaries, the apical half striated with grey rather darker than the ground colour ; fringe imperfectly spotted with blackish ; head, collar and prothorax smoky brown ; antennæ with reddish-brown pectinations ; under surface of wings sordid greyish-white striated with grey ; primaries with sericeous whitish inner border, a blackish subcostal dash beyond the middle ; secondaries sericeous white at base and abdominal border ; body sericeous white ; abdomen and legs sordid. Expanse of wings 37 mm.

53. *Cossus senex*, n. sp.

Snow-white ; primaries finely striated with grey and black ; with three costal spots, of which the central one is largest, almost V-shaped, partly brown and partly black, situated at the basal two-fifths of the costal area and extending across the cell ; the other two spots black, the outer one sometimes ill-defined ; a small square spot at about the centre of the lower radial interspace, from each corner of which an irregular fine black line is emitted ; a small sinuous black line more distinct than the ordinary striæ at external third of interno-median area, also a slender subapical costal V-shaped character ; secondaries sericeous, the apical half striated with grey ; collar ash-grey, speckled with black ; antennæ with sandy-brown pectinations ; wings below white, the apical half striated with blackish ; primaries with the costal border-towards the base spotted with black ; a diffused blackish patch before the end of the cell ; secondaries with an oblique subbasal pinky-brown streak, obliterated in some examples ; fringe of all the wings grey spotted ; tarsi barred with black. Expanse of wings 34-44 mm.